

RETAIL STORE STOCK INVENTORY ANALYTICS

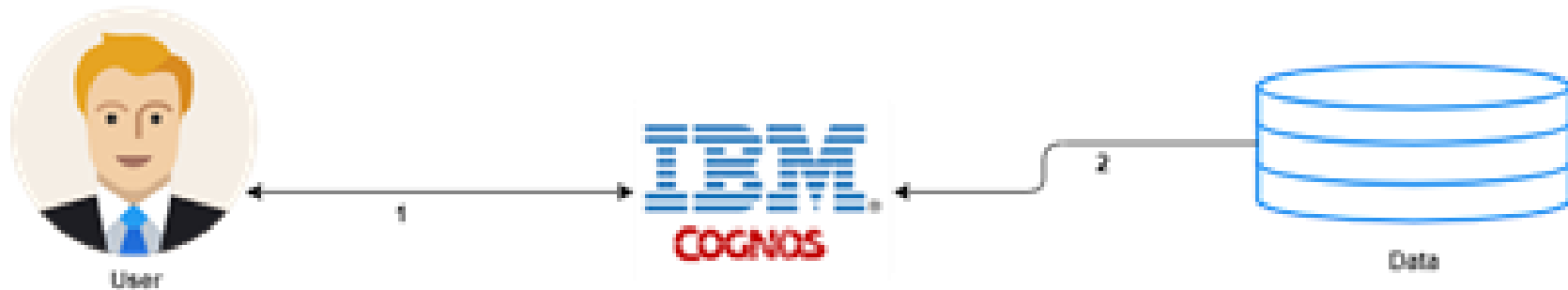
PROJECT DESCRIPTION:

This dataset contains a lot of historical sales data of a Brazilian top retailer

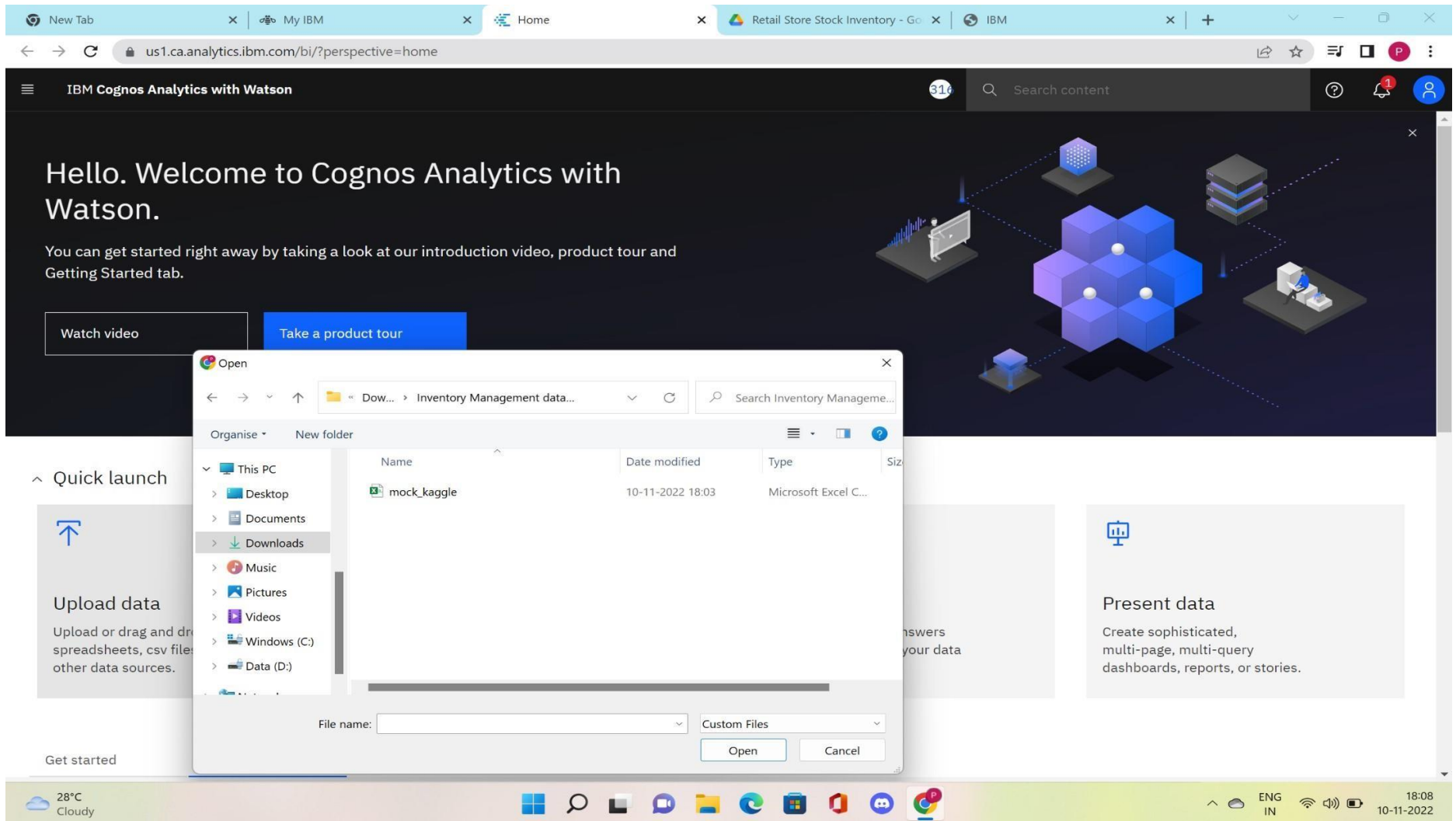
Basic Questions of every retailer: How much inventory should I carry? Too much inventory means working capital costs, operational costs and a complex operation, lack of inventory leads to lost sales, unhappy customers and a damaged brand.

This is why short-term forecasting is so important in the retail and consumer goods industry.

Technical Architecture:



DATA COLLECTION AND PERPARATION



New TabMy IBMHomeRetail Store Stock Inventory - GoIBM

us1.ca.analytics.ibm.com/bi/?perspective=home

IBM Cognos Analytics with Watson316Search content

Select sources

My content

Type any text to filter items in this folder

Inventory Management dataset.zip10/11/2022, 6:35 AM

mock_kaggle.csv10/11/2022, 6:39 AM

Filter by

[Reset filters](#)

Type

☐ Folders

☐ Packages

☐ Files

☐ Data sets

☐ Modules

Modified

☒ All

☐ Today

☐ Yesterday

☐ Past week

☐ Past month

Cancel

OK

Get started

Recent

28°C Cloudy

ENG IN

18:1110-11-2022

New Tab × My IBM × * New data module × Retail Store Stock Inventory - Go × IBM × +

us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=1584271249_5ac71fbf382e4ad485ed78bc2a4cd331_sessionTemp&objRef=&tid=1584271249_5ac71fbf382e4ad485ed7...

IBM Cognos Analytics with Watson * New data module 310 Search content ? ? ? ? ?

Properties

Data module +

Search

New data module

Navigation paths +

Inventory M...dataset.zip

Row Id

data

venda


estoque

preco

Grid


Relationships

Custom tables



Preview data
To preview data, select a table, a column in a table, or a folder that contains columns.

28°C Cloudy



ENG IN 18:11 10-11-2022

PREPARING DATASET :

The screenshot shows the IBM Cognos Analytics interface with a 'Create calculation' dialog box open. The browser tabs at the top include 'New Tab', 'My IBM', 'New data module', 'Retail Store Stock Inventory - Go', and 'IBM'. The URL bar shows a complex path to a perspective view. The dialog box has a title bar 'Create calculation' and a close button. Below the title bar is a 'Name' field containing 'Month data'. The main area is divided into 'Components' and 'Expression' sections. The 'Components' section on the left lists available data sources: 'Inventory Ma...dataset.zip', '# Row Id', 'data', 'venda', 'estoque', and 'preco'. The 'Expression' section on the right contains the formula '1 Month(data_)'. Below the expression field is a 'Validation Results' section showing a green checkmark and the message 'The expression is valid.'. At the bottom of the dialog box, there is a checkbox labeled 'Calculate after aggregation' which is currently unchecked, and two buttons: 'Cancel' and 'OK'. The background shows a Windows taskbar with various application icons and a system tray displaying weather (28°C Cloudy), language (ENG IN), and date/time (18:15 10-11-2022).

us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=1584271249_5ac71fbf382e4ad485ed78bc2a4cd331_sessionTemp&objRef=&tid=1584271249_5ac71fbf382e4ad485ed7...

IBM Cognos Analytics with Watson

Create calculation

Name: Month data

Components

- Inventory Ma...dataset.zip
 - # Row Id
 - data
 - venda
 - estoque
 - preco

Expression

1 Month(data_)

Validation Results

✓ The expression is valid.

☐ Calculate after aggregation

Cancel OK

28°C Cloudy

18:15 10-11-2022

New TabMy IBMNew data moduleRetail Store Stock Inventory - GoIBM

us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=1584271249_5ac71fbf382e4ad485ed78bc2a4cd331_sessionTemp&objRef=&tid=1584271249_5ac71fbf382e4ad485ed7...

IBM Cognos Analytics with WatsonNew data moduleSearch content

Properties

Data module

Search

New data module

Navigation paths

Inventory ...ataset.zip

Month data

1

2

3

4

5

6

7

8

9

10

11

12

Row Id

data

venda

GridRelationshipsCustom tables

Month data	Row Id	data	venda
1	1	2014-01-01	0
1	2	2014-01-02	70
1	3	2014-01-03	59
1	4	2014-01-04	93
1	5	2014-01-05	96
1	6	2014-01-06	145
1	7	2014-01-07	179
1	8	2014-01-08	321
1	9	2014-01-09	125
1	10	2014-01-10	88
1	11	2014-01-11	188
1	12	2014-01-12	121
1	13	2014-01-13	134
1	14	2014-01-14	80
1	15	2014-01-15	82

Properties

GeneralNavigation paths

LabelMonth data

Hide from users

ExpressionView or edit

UsageAttribute

AggregateCount Distinct

Data typeInteger

Represents

Time

Year

Description

Comments

28°C Cloudy

ENG IN18:20 10-11-2022

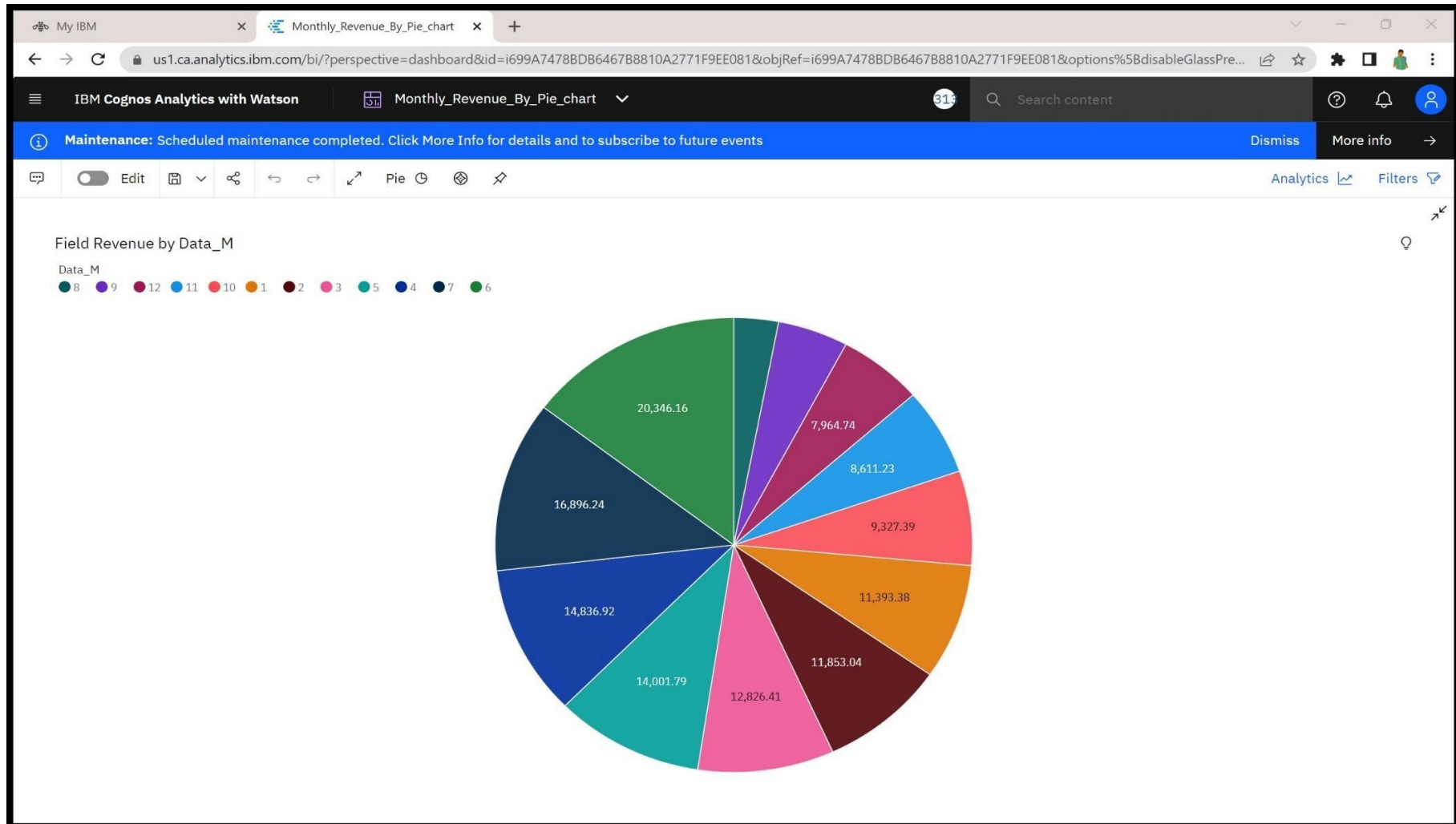
FINAL DATASET:

The screenshot displays the IBM Cognos Analytics web interface. The browser tab is 'INVENTORY_ANALYSIS_module'. The URL is https://us1.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=iD43E4C17F3B2455F9DAD2AF8493B6B18&objRef=iD43E4C17F3B2455F9DAD2AF8493B6B18&tid=2878668387_0ef872aff.... The page title is 'IBM Cognos Analytics with Watson'. The main content area shows a data grid for 'Inventory Analysis'. The grid has columns: Row Id, Data_M, YEAR, SALES, STOCK, PRICE, and Field Revenue. The data is sorted by Row Id in ascending order. The left sidebar shows the 'Data module' structure with 'Inventory_analysis' selected. The 'Properties' panel is visible on the right.

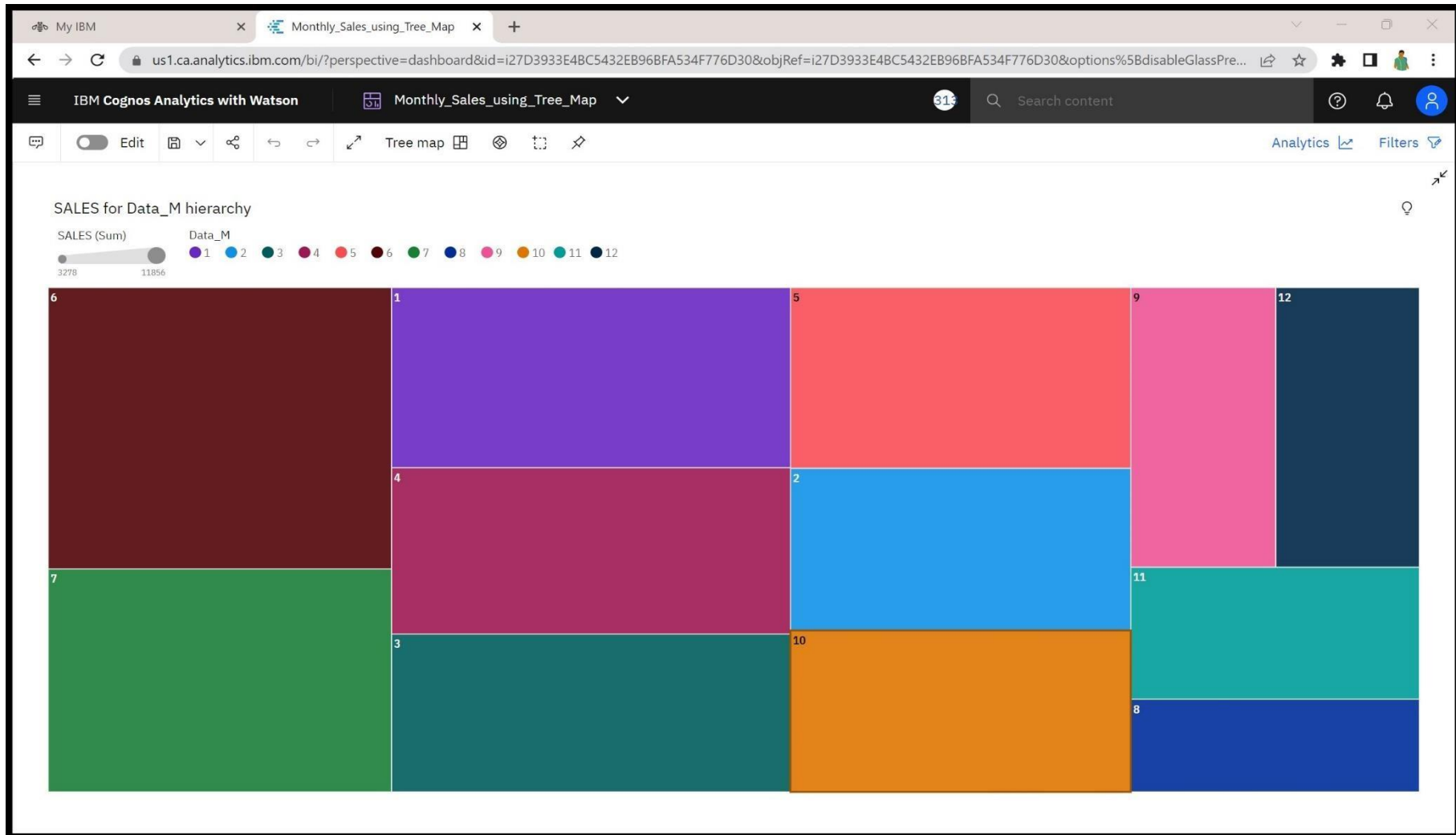
Row Id	Data_M	YEAR	SALES	STOCK	PRICE	Field Revenue
1	1	1 Jan, 2014	0	4972	1.29	0
2	1	2 Jan, 2014	70	4902	1.29	90.3
3	1	3 Jan, 2014	59	4843	1.29	76.11
4	1	4 Jan, 2014	93	4750	1.29	119.97
5	1	5 Jan, 2014	96	4654	1.29	123.84
6	1	6 Jan, 2014	145	4509	1.29	187.05
7	1	7 Jan, 2014	179	4329	1.29	230.91
8	1	8 Jan, 2014	321	4104	1.29	414.09000000
9	1	9 Jan, 2014	125	4459	1.09	136.25
10	1	10 Jan, 2014	88	5043	1.09	95.92
11	1	11 Jan, 2014	188	5239	1.09	204.92000000
12	1	12 Jan, 2014	121	5118	1.09	131.89000000
13	1	13 Jan, 2014	134	4984	1.09	146.06
14	1	14 Jan, 2014	80	4904	1.09	87.2

DATA EXPLORATION

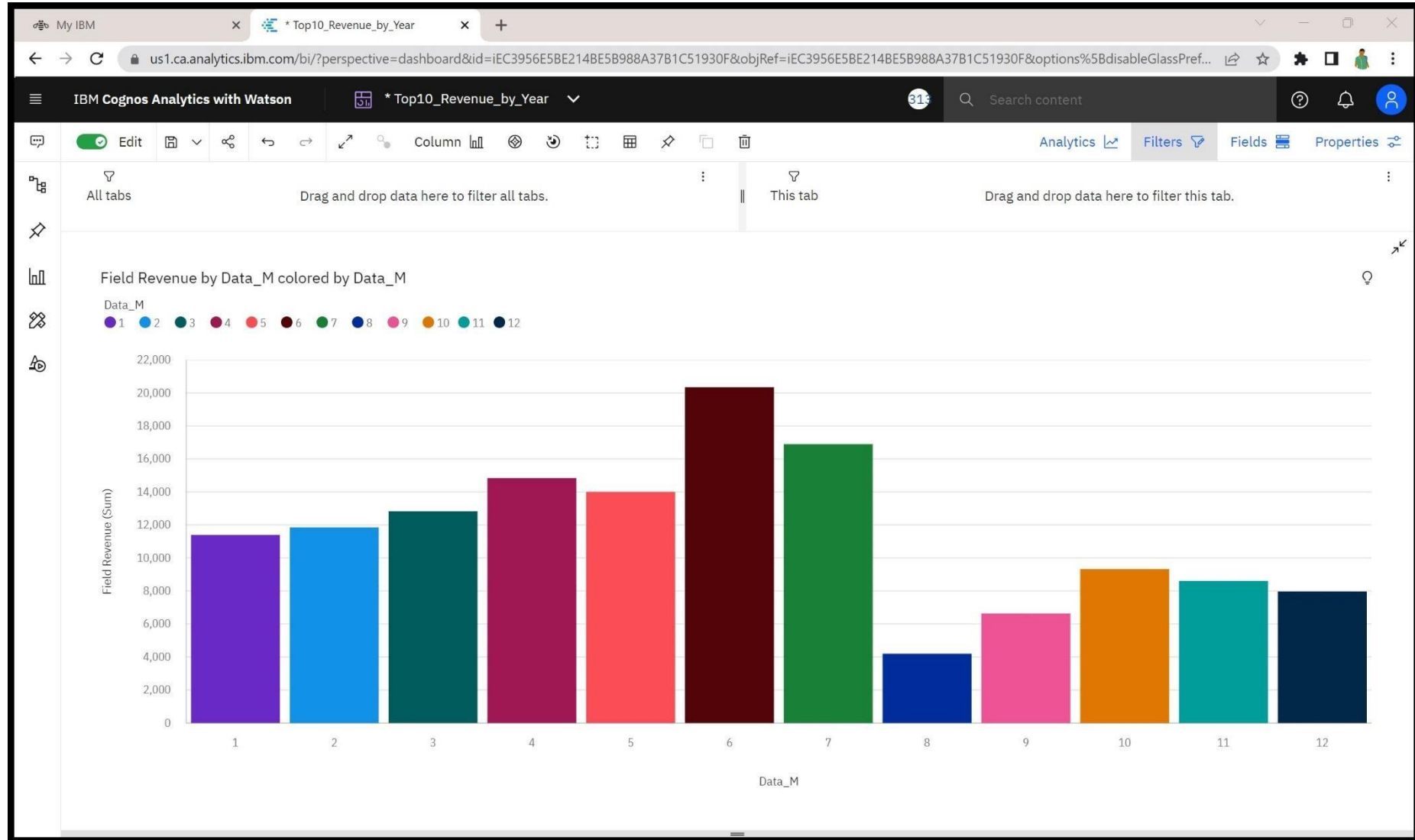
FIELD BY REVENUE:



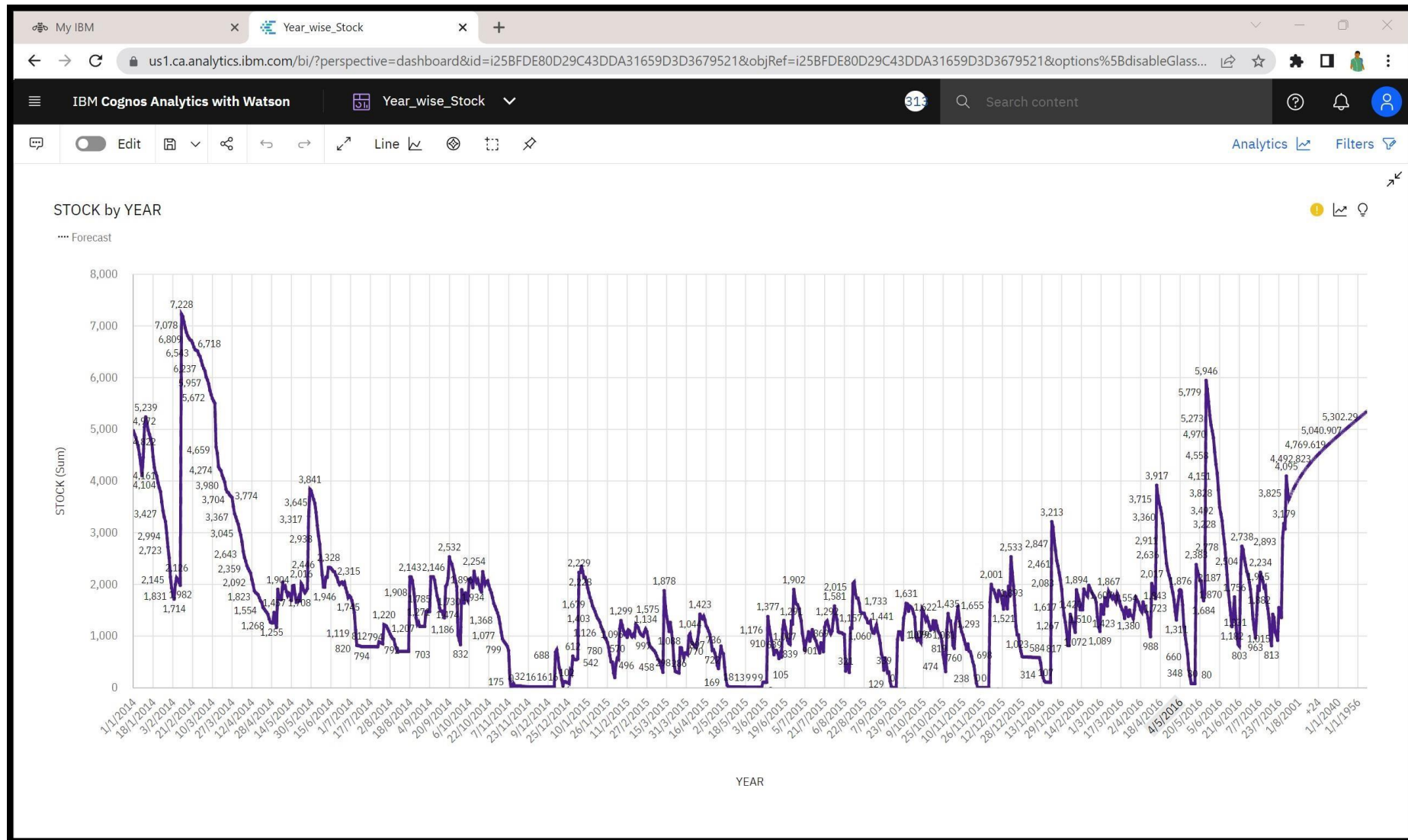
SALES FOR EACH MONTH:



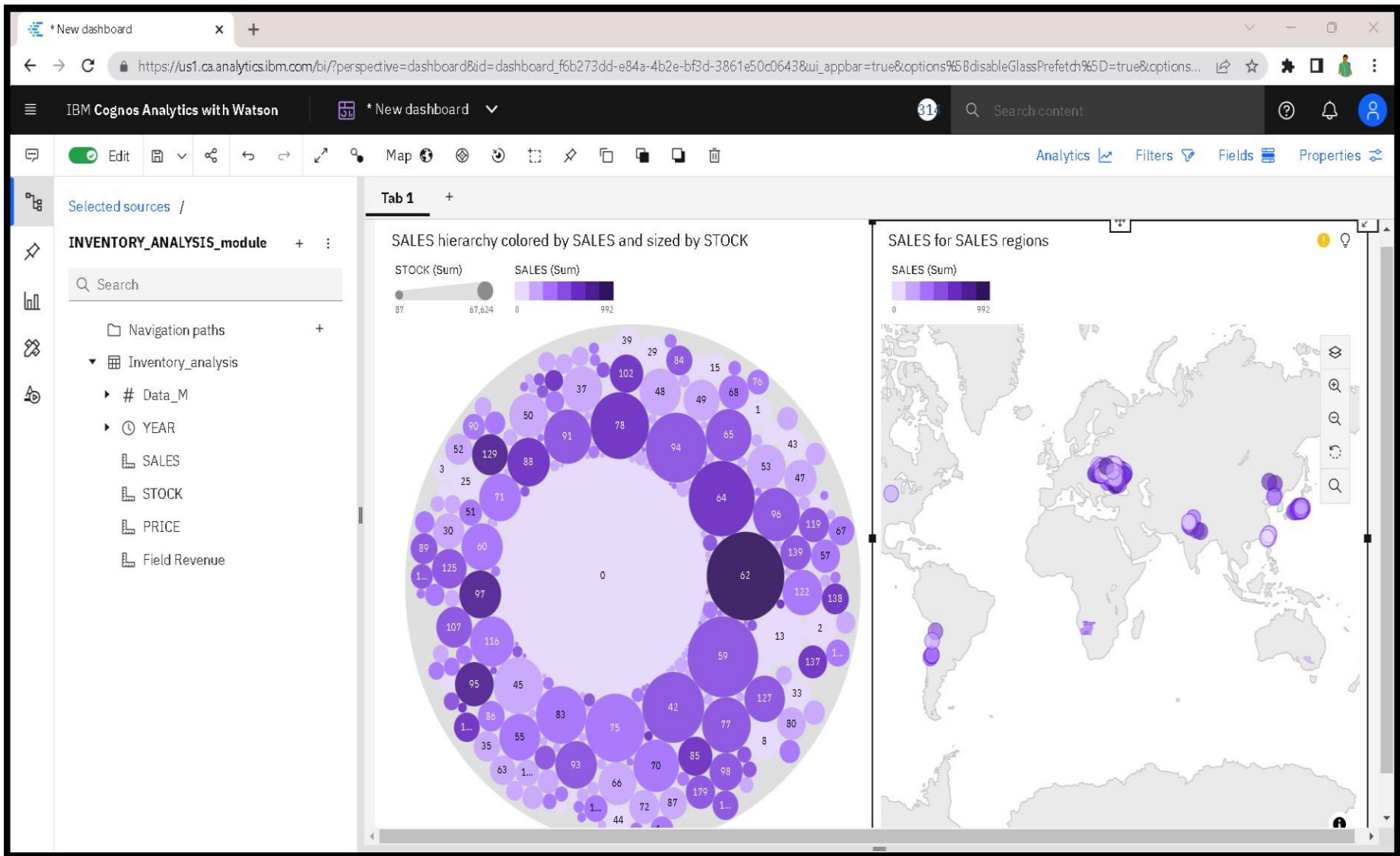
REVENUE FOR EACH MONTH :

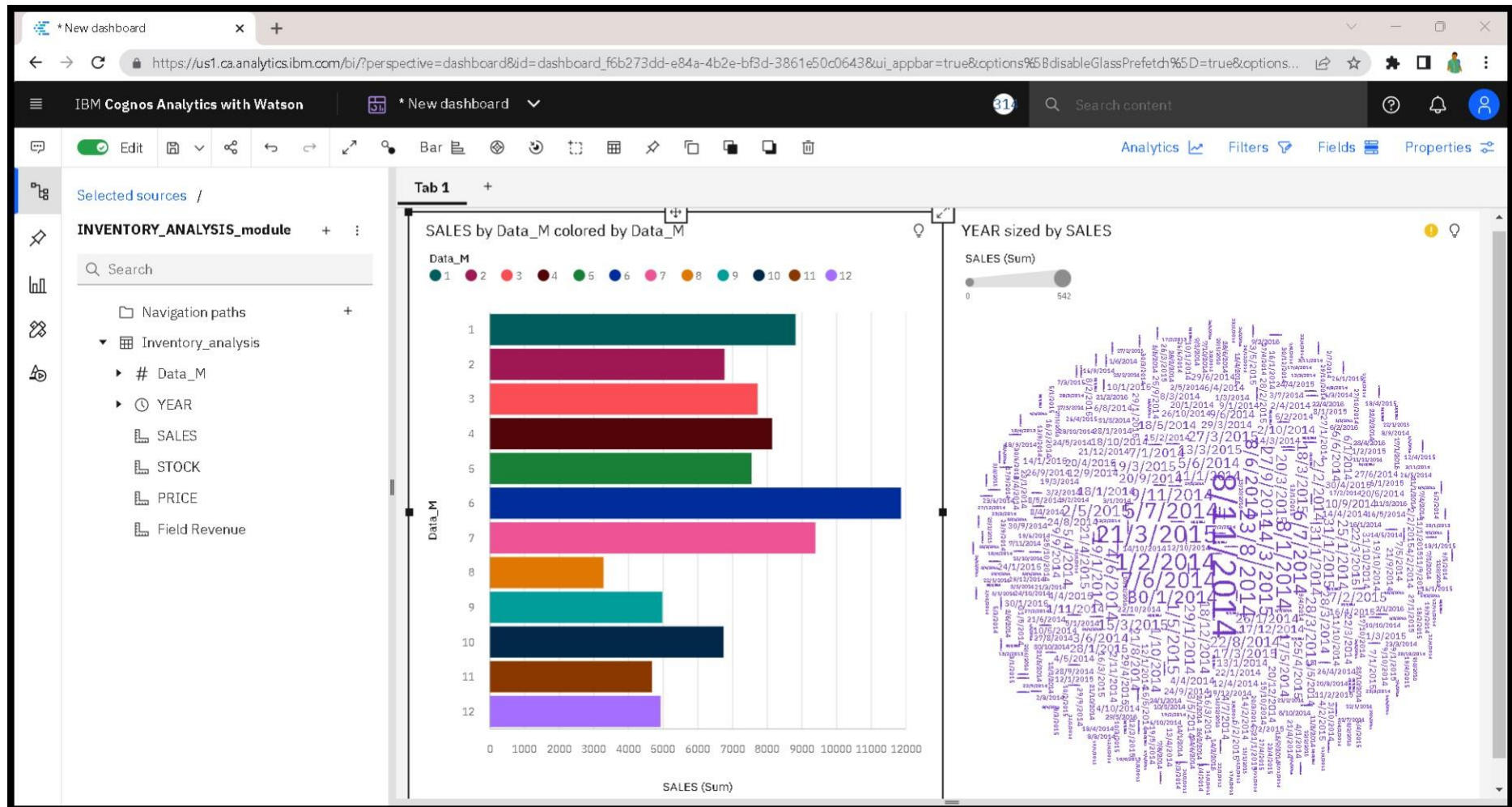


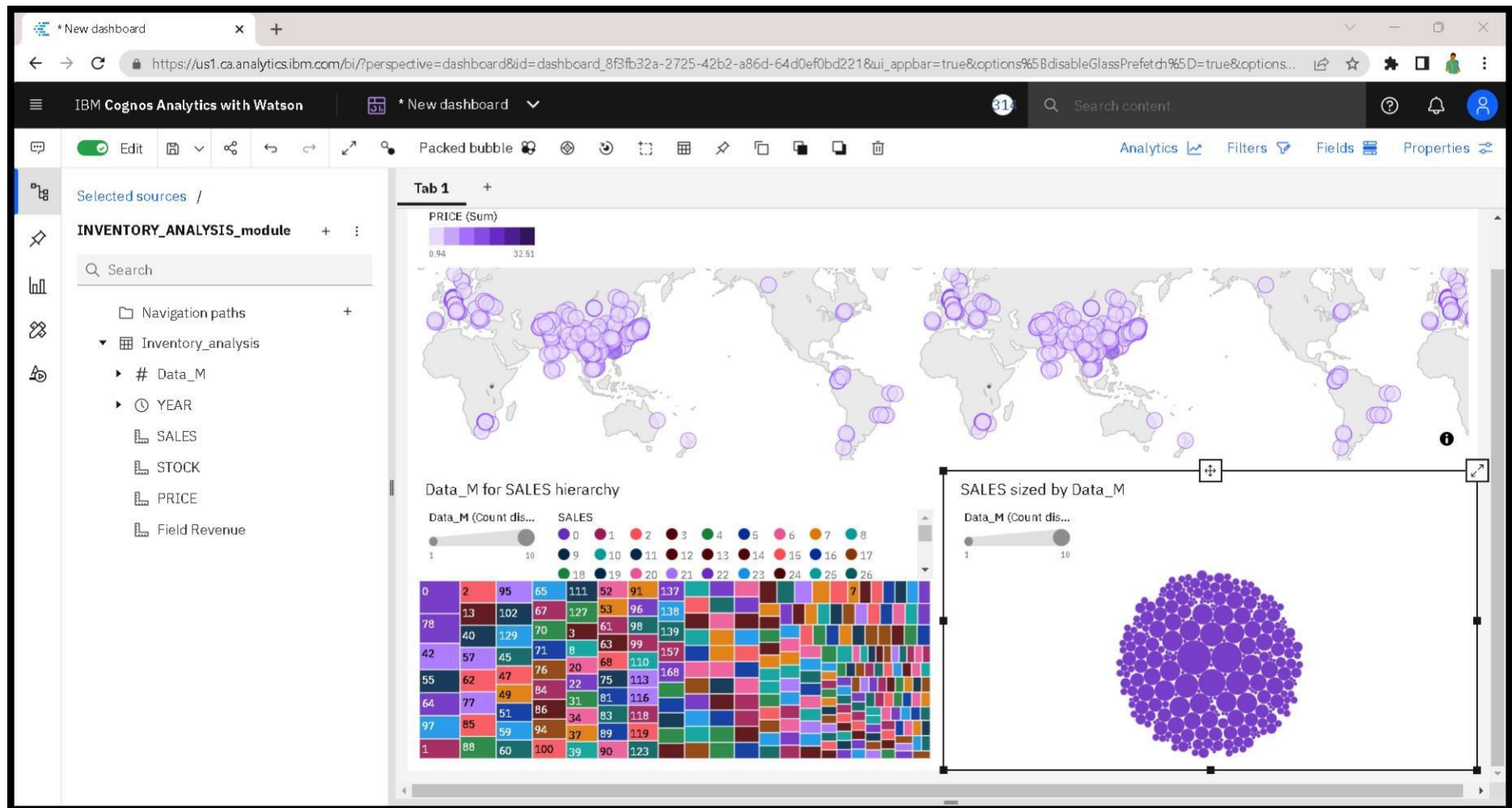
STOCK BY YEAR:



DASHBOARD CREATION



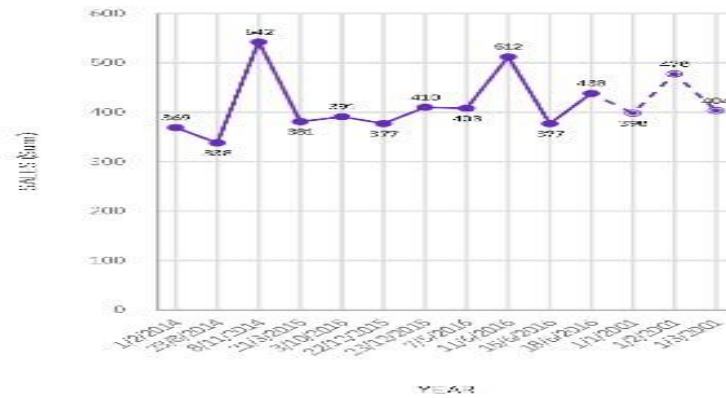




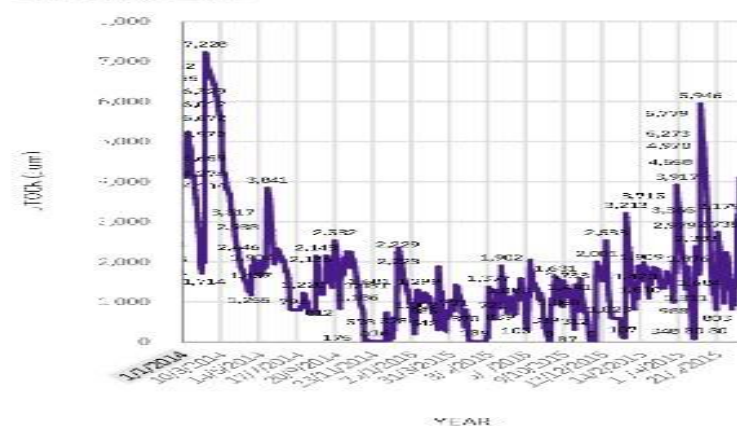
DASHBOARD

SALES by YEAR

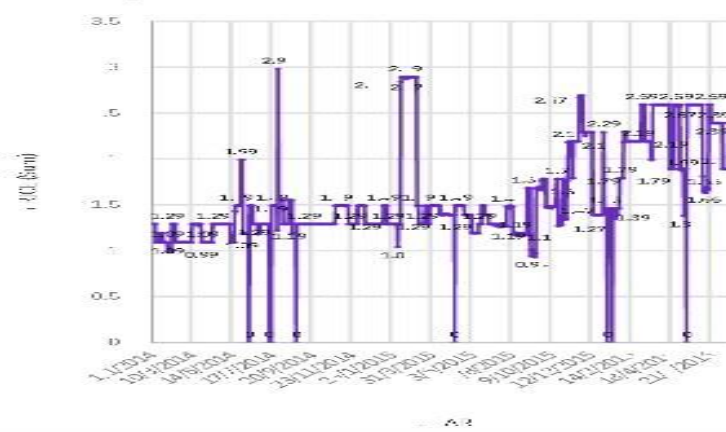
Forecast



STOCK by YEAR

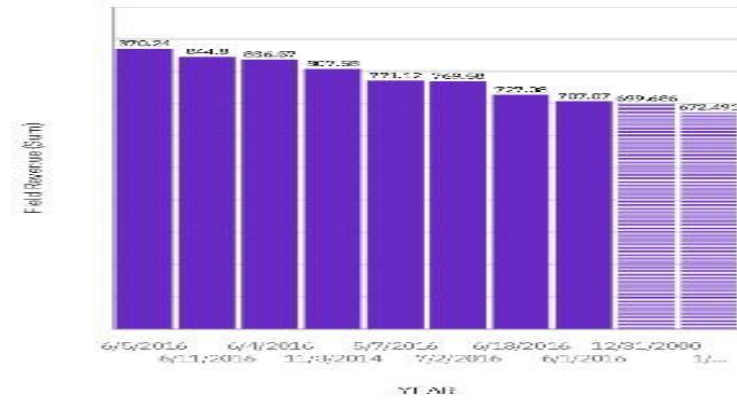


PRICE by YEAR



Field Revenue by YEAR

Forecast



REPORT CREATION

